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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,145	07/31/2003	Ken L. Chang	K35A1301	5429
35219	7590	06/22/2005	EXAMINER	
WESTERN DIGITAL TECHNOLOGIES, INC. 20511 LAKE FOREST DR. -C205 LAKE FOREST, CA 92630			BLOUIN, MARK S	
			ART UNIT	PAPER NUMBER
			2653	
DATE MAILED: 06/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p>Application No.</p> <p>10/633,145</p>	<p>Applicant(s)</p> <p>CHANG ET AL.</p>	
	<p>Examiner</p> <p>Mark Blouin</p>	<p>Art Unit</p> <p>2653</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Examiner's Drawings</u>                |

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**Detailed Action**

***Response to Amendment***

- The reply filed on June 3, 2005 was applied to the following effect: Claims 1-8 were amended and Claim 9 was added.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

The phrase "... being an integer in a range *between* 2 to 3." (Claim 1, line 14 and Claim 5, line 19) does not include endpoints 2 and 3. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loubier (USPN 5,656,877) in view of Budde et al (USPN 6,728,073).

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5. Regarding Claims 1-9, Loubier shows (Figs. 1-4), a disk drive comprising a disk drive base, a spindle motor attached to the disk drive base, a disk supported on the spindle motor, a head stack assembly rotatably coupled to the disk drive base, the head stack assembly including a stamped actuator arm (40), a head gimbal assembly (Col 3, line 55) attached to the stamped actuator arm (Col 3, lines 55-58), the head gimbal assembly including a trace suspension flex having a metal base layer and a plurality of conductors supported by the metal base layer (Col 5, lines 7-10), the stamped actuator arm including an actuator arm side surface extending longitudinally along the stamped actuator arm, and a plurality of longitudinally spaced apart stamped protrusions extending parallel to a top surface, at least one having a thickness that is substantially less than that of the actuator arm, protrusions being in contact with the trace suspension flex (See Examiner's Drawing), each stamped protrusion extending from the actuator arm side surface in a direction generally perpendicular to the pivot axis, but does not show the plurality of stamped protrusions being an integer in a range between 2 to 3, wherein the integer is 2 or 3, wherein the stamped protrusions are generally equally spaced apart longitudinally along the actuator arm side surface.

Budde et al shows (Fig. 4) the plurality of stamped protrusions being an integer in a range between 2 to 3, wherein the integer is 2 or 3, wherein the stamped protrusions are generally equally spaced apart longitudinally along the actuator arm side surface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the actuator arm of Loubier with 2 to 3 equally spaced protrusions as taught by Budde et al. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to provide the actuator arm of Loubier with 2 to

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3 equally spaced protrusions as taught by Budde et al in order to support the trace suspension flex.

### ***Response to Arguments***

6. Applicant's arguments filed June 3, 2005 have been fully considered but they are not persuasive.

Applicant asserts on Page 7:

*“Loubier, including the passages cited by the examiner and the examiners drawing, nowhere discloses a trace suspension flex nor any actuator arm protrusions in contact with a trace suspension flex. Rather Loubier only discloses wires and machine wire guides in the actuator arm. No trace suspension flex contacts any of the protrusions identified by the examiner in the examiner's drawing. Therefore, Loubier does not teach or disclose any actuator arm protrusions in contact with a trace suspension flex...Buddhe also does not teach or disclose any actuator arm protrusions in contact with a trace suspension flex.”*

The Examiner maintains that both Loubier and Buddhe disclose actuator arm protrusions in contact with a trace suspension flex. Although the wire guides are machined, they are machined through the protrusions pointed out in the Examiner's Drawing, and therefore the trace suspension flex (flexible wires tracing a path to the transducer from the voice coil motor) are in contact with those protrusions. In addition, the Examiner has included another drawing specifically showing the protrusions of Buddhe in contact with the trace suspension flex on the actuator arm. Therefore, the rejection of Claims 1-9 is upheld.

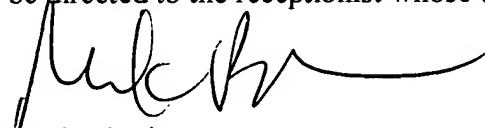
### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (703) 305-5629. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular and After Final communications.

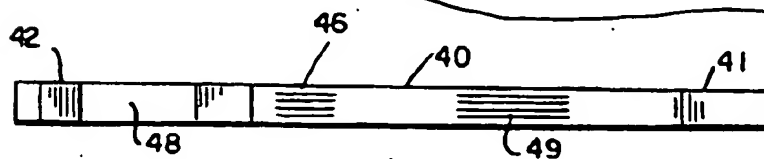
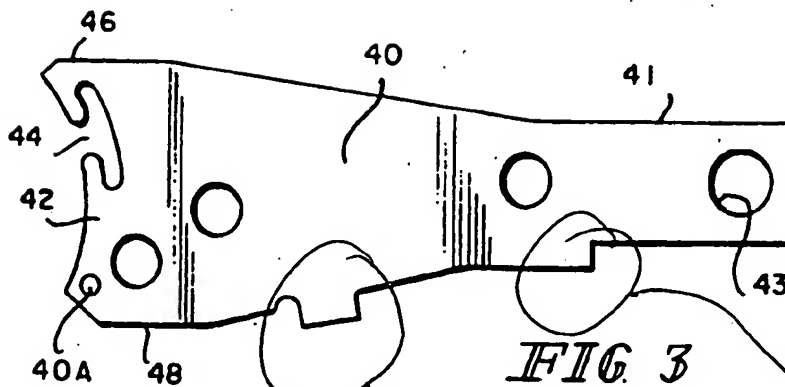
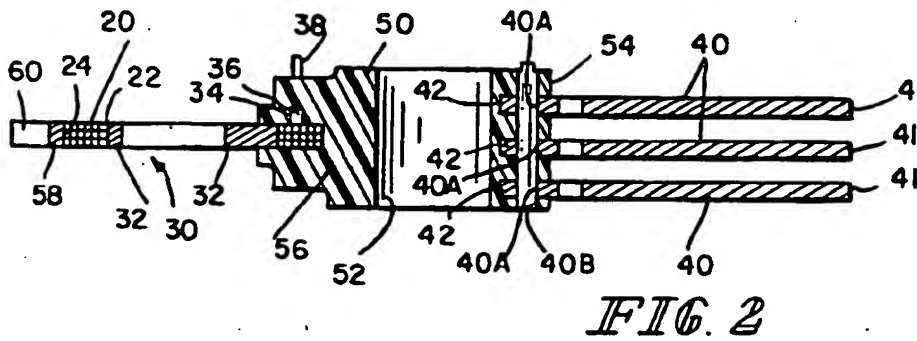
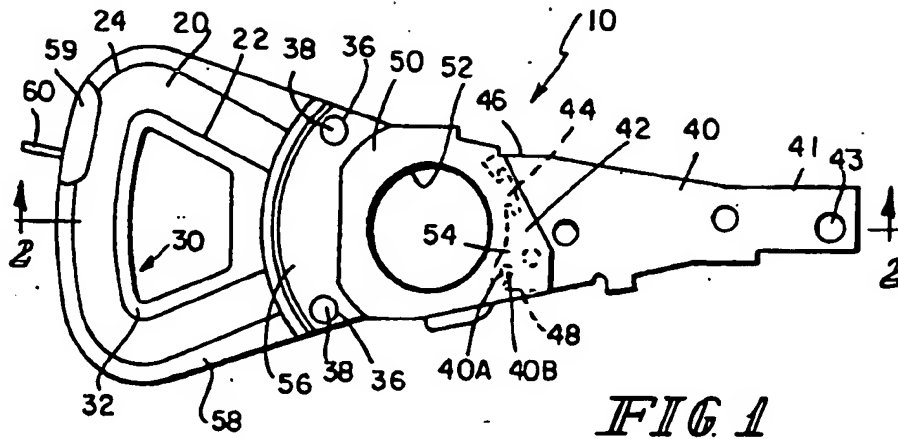
Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Mark Blouin  
Patent Examiner  
Art Unit 2653  
June 15, 2005

A. J. HEINZ  
PRIMARY EXAMINER  
GROUP ~~2653~~ A. U. 2653





EXAMINER'S DRAWING

